

ROOF FRAMING PLAN

SCALE 1/8" = 1'-0"

DIAGONAL BRACE SCHEDULE	
MARK	SIZE
BR01	3x6 DF#1, TYPICAL

BEAM/RAFTER SCHEDULE	
MARK	SIZE
RR01	3x8 DF#1 @ 20' OC
BR01	1x12 DF#1
BR02	1x10 DF#1

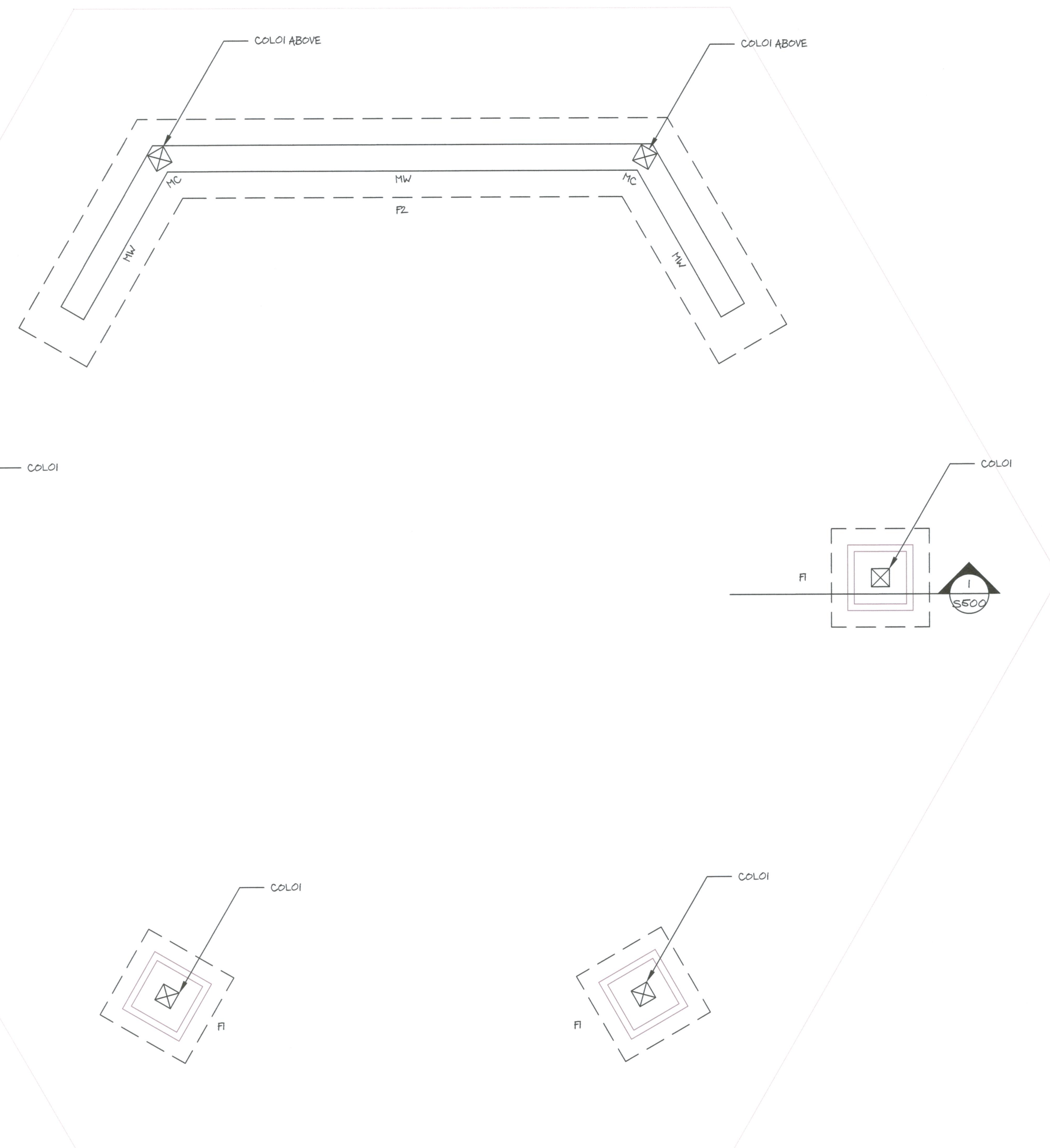
MASONRY WALL & COLUMN SCHEDULE					
WALL SYMBOL	WALL SIZE		WALL CENTER		STIRRUPS
	THICKNESS	HEIGHT	VERTICAL	HORIZONTAL	
MW	8"	8'-0"	#5 BAR @ 24" OC	#5 BAR @ 32" OC	
MC	8"	8'-0"	(2) #5 BARS		#3 BARS @ 8" OC

CENTERLINE OF FOOTING IS CENTERLINE OF WALL, UNO.

COLUMN SCHEDULE	
MARK	SIZE
COLO1	8x8 DF#1, TYPICAL

FOOTING SCHEDULE					
FTG SYMBOL	FOOTING SIZE		DEPTH	REINFORCING BARS	
	WIDTH	LENGTH		LONGITUDINAL	TRANSVERSE
F1	30"	30"	12"	(3) #1 BARS	(3) #1 BARS
F2	24"	CONT	12"	(3) #1 BARS	#1 BARS @ 16" OC

CENTERLINE OF FOOTING IS CENTERLINE OF WALL OR COLUMN, UNO.



FOUNDATION PLAN

SCALE 1/8" = 1'-0"

REB 01-26-2018
 DRAWN BY: DATE:
 REB 01-29-2018
 CHECKED BY: DATE:

REVISED BY: DATE:
 APPROVED BY: DATE:

APPROVED BY: DATE:
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**Montana Fish,
Wildlife & Parks**

ROOF FRAMING & FOUNDATION PLANS
 MONTANA WILD EDUCATION CENTER GAZEBO PROJECT
 FWP #17-16



28 ANTLER AVENUE
 CLANCY, MT 59634
 406-443-6111
 jeff@larsonce.com



SHEET:
S200



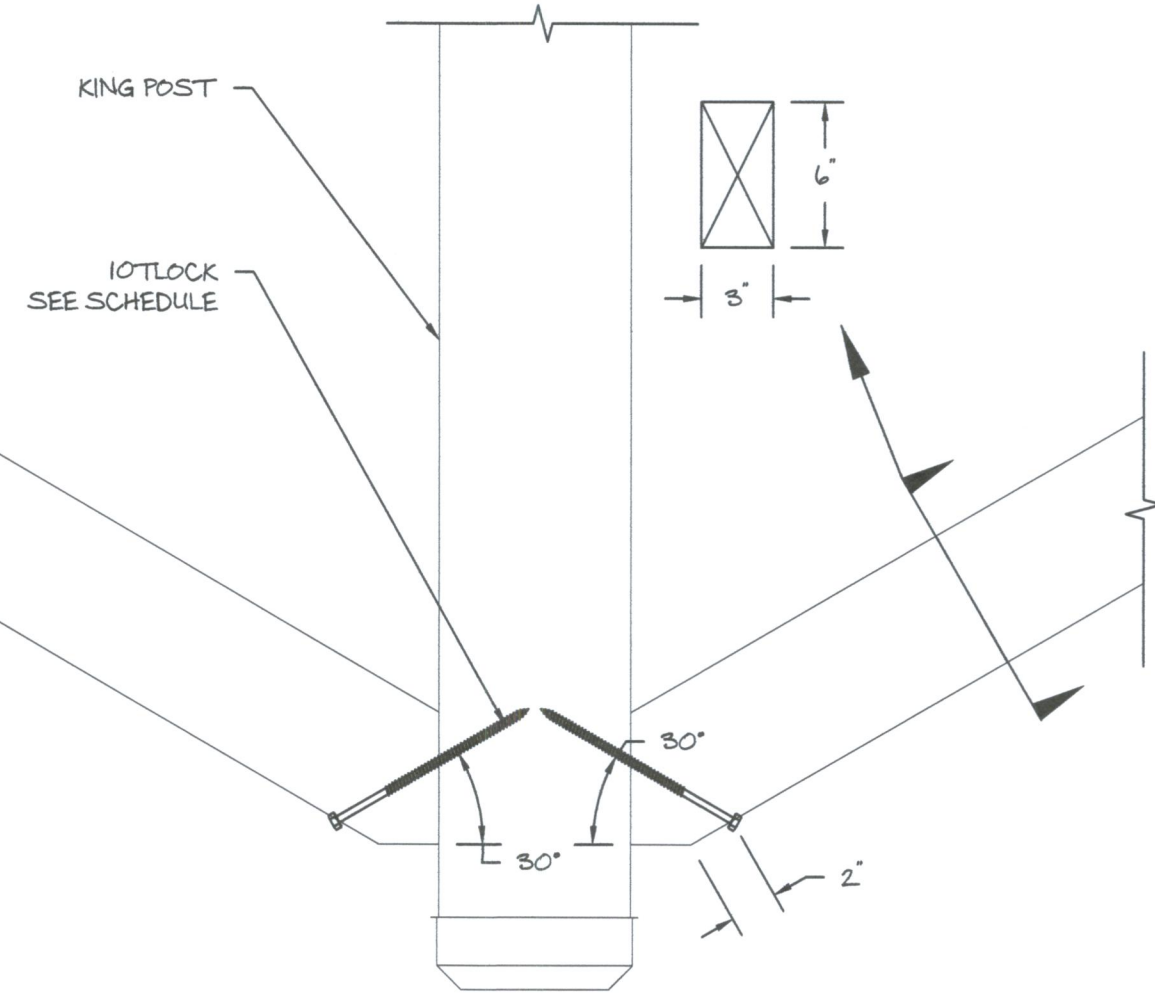
**Montana Fish,
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MONTANA WILD EDUCATION CENTER GAZEBO PROJECT
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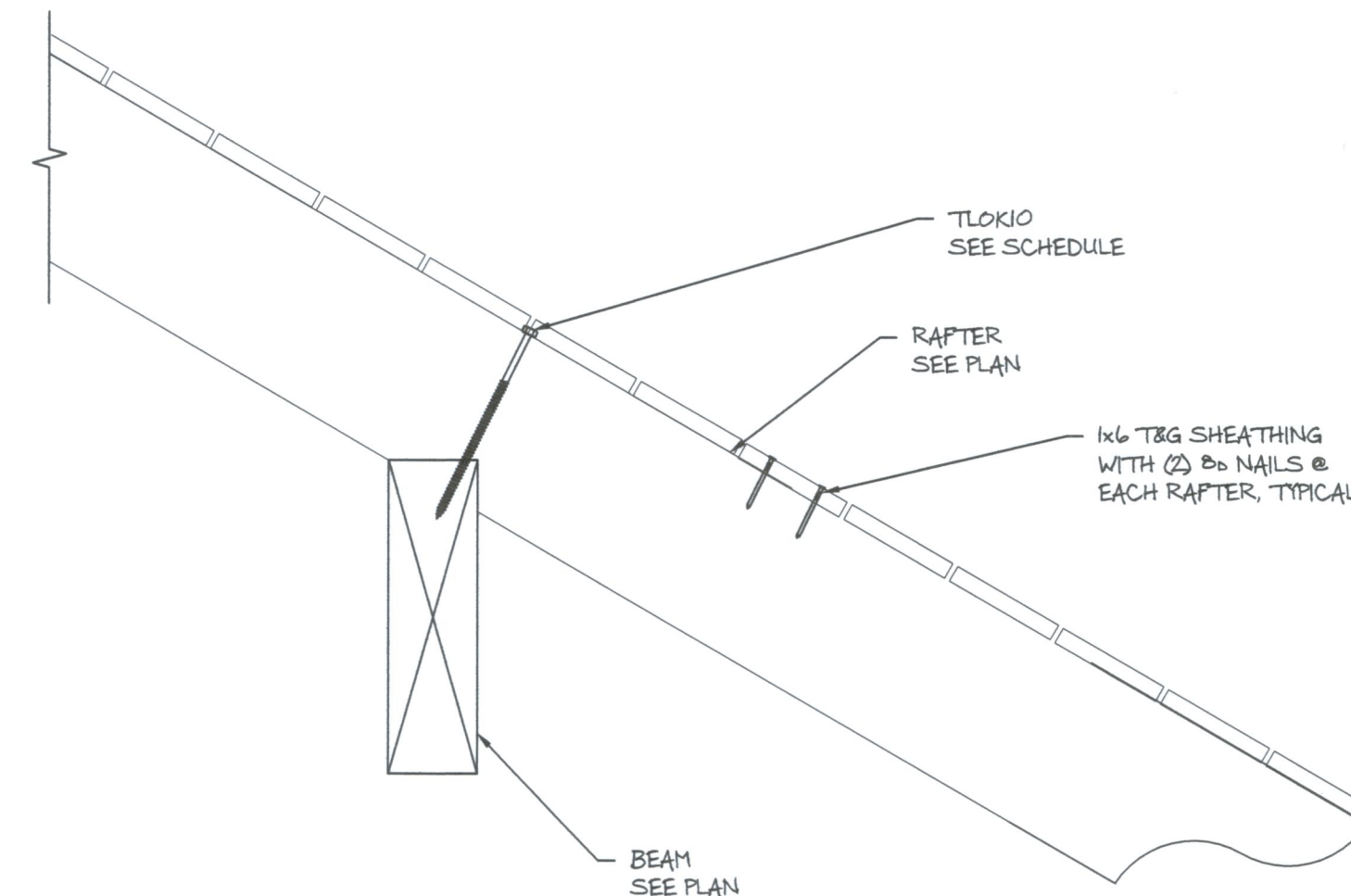


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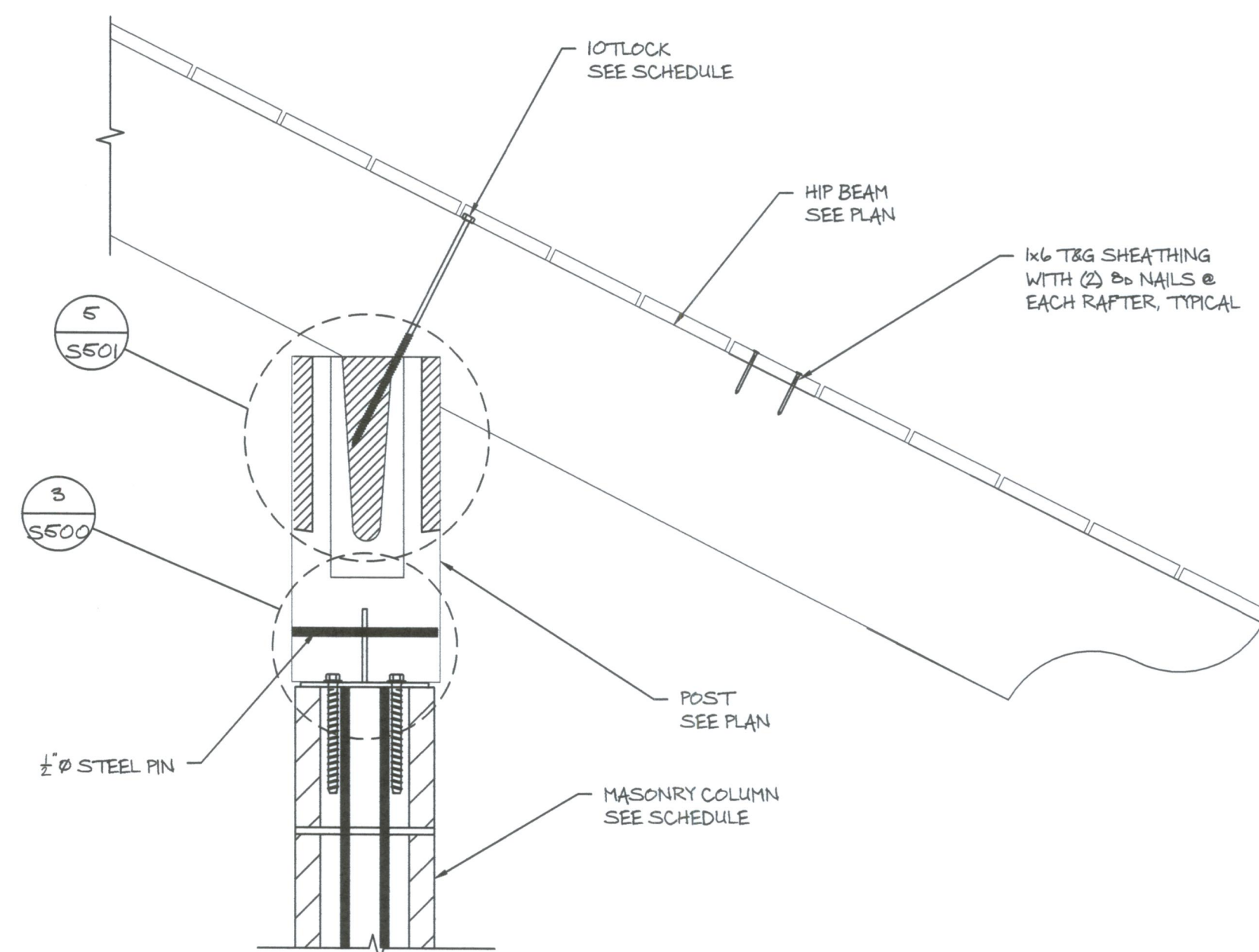
BRACES TO KING POST
SCALE: 1/4" = 1'-0" 7



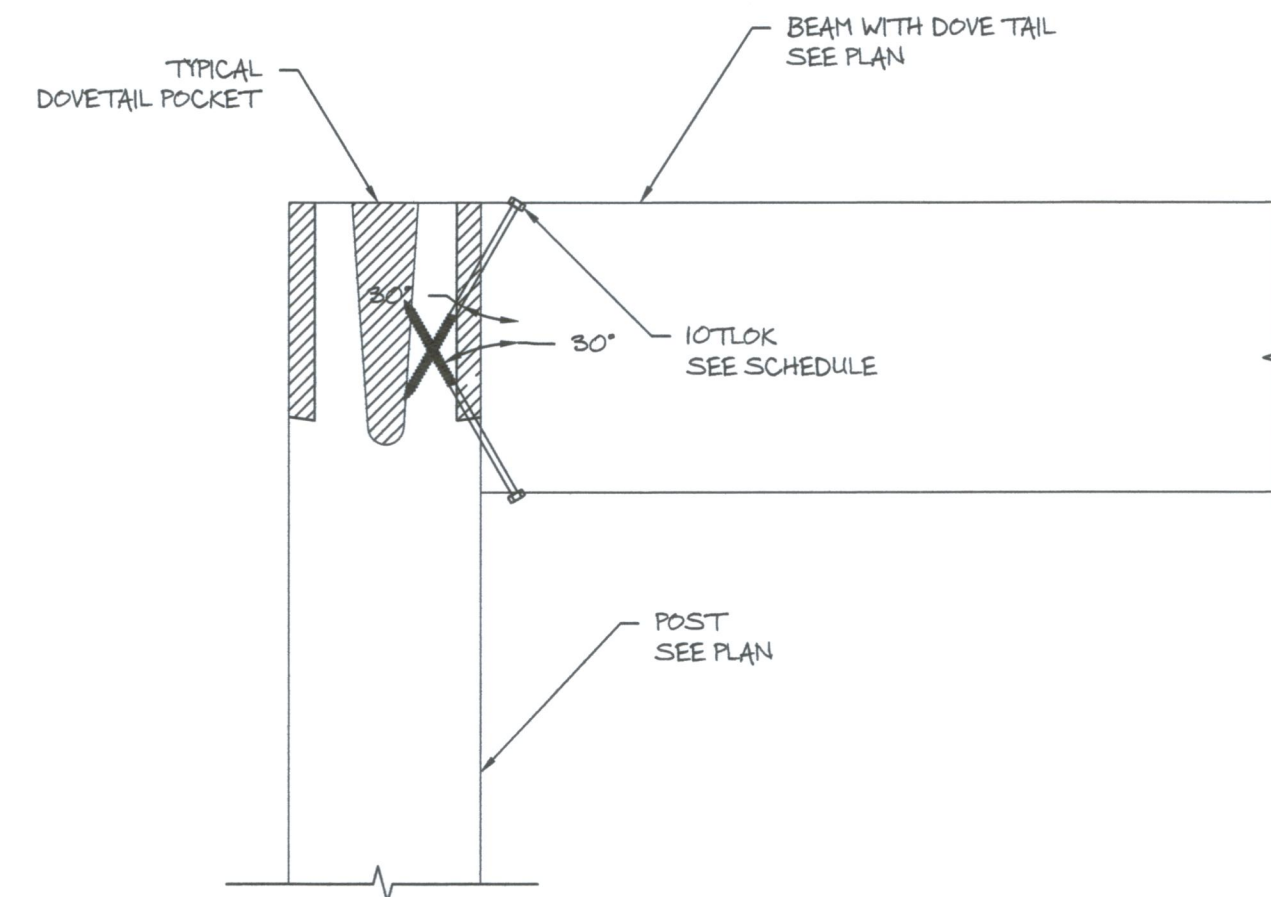
BEAM TO RAFTER
SCALE: 1/2" = 1'-0" 4

PLYLOG TIMBERLOK FASTENER DESIGNATION	HEAD MARKING	OVERALL LENGTH	LENGTH OF THREAD	UNTHREADED SHANK DIAMETER	MINOR THREAD (ROOT) DIAMETER
TLOCK22	P2.5	2 1/2"	1 1/4"		
TLOCK04	P4.0	4"	2"		
TLOCK06	P6.0	6"	2"	0.189	0.172
TLOCK08	P8.0	8"	2"		
TLOCK10	P10.0	10"	2"		

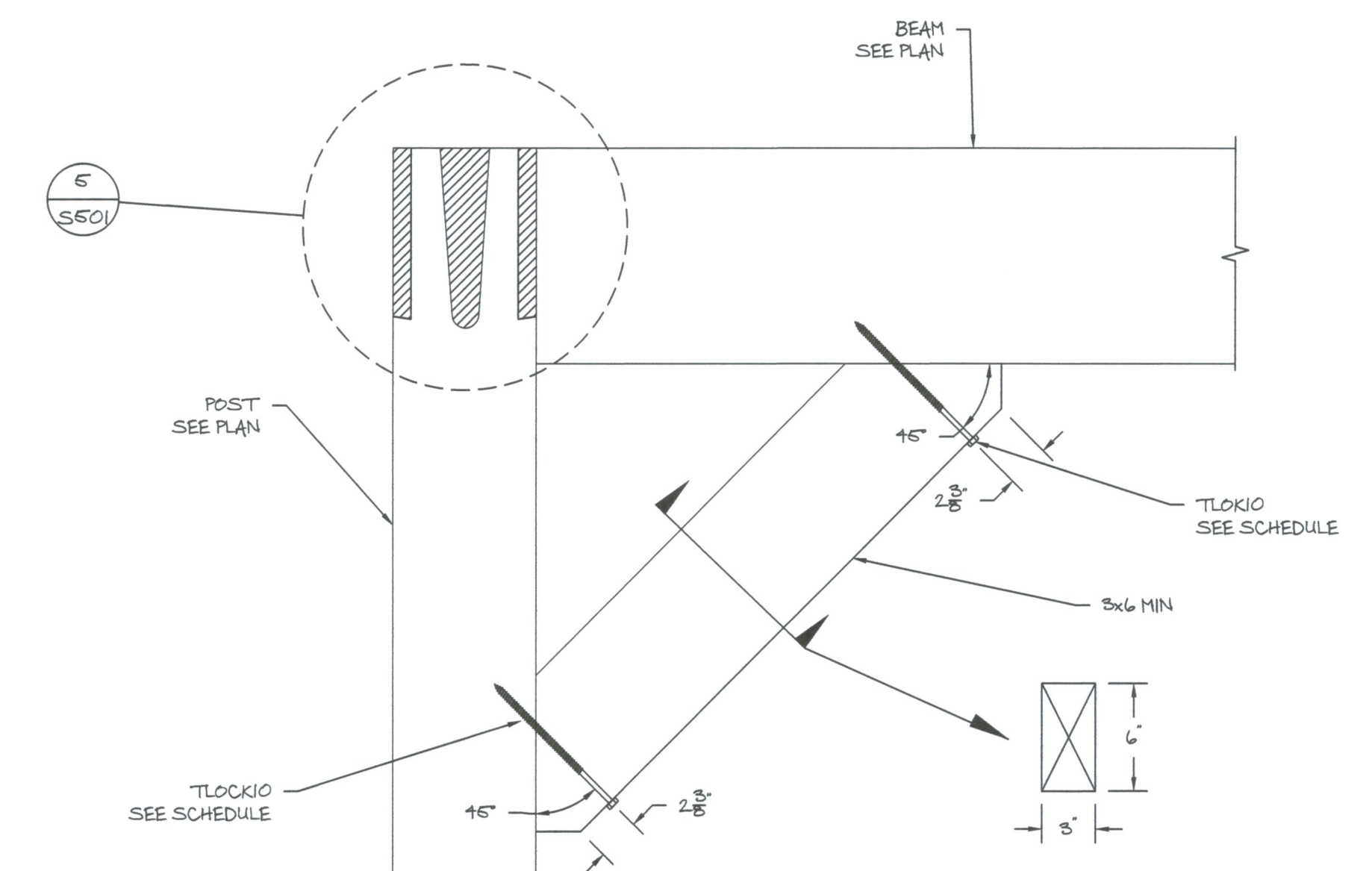
SCREW SCHEDULE
SCALE: 1/2" = 1'-0" 1



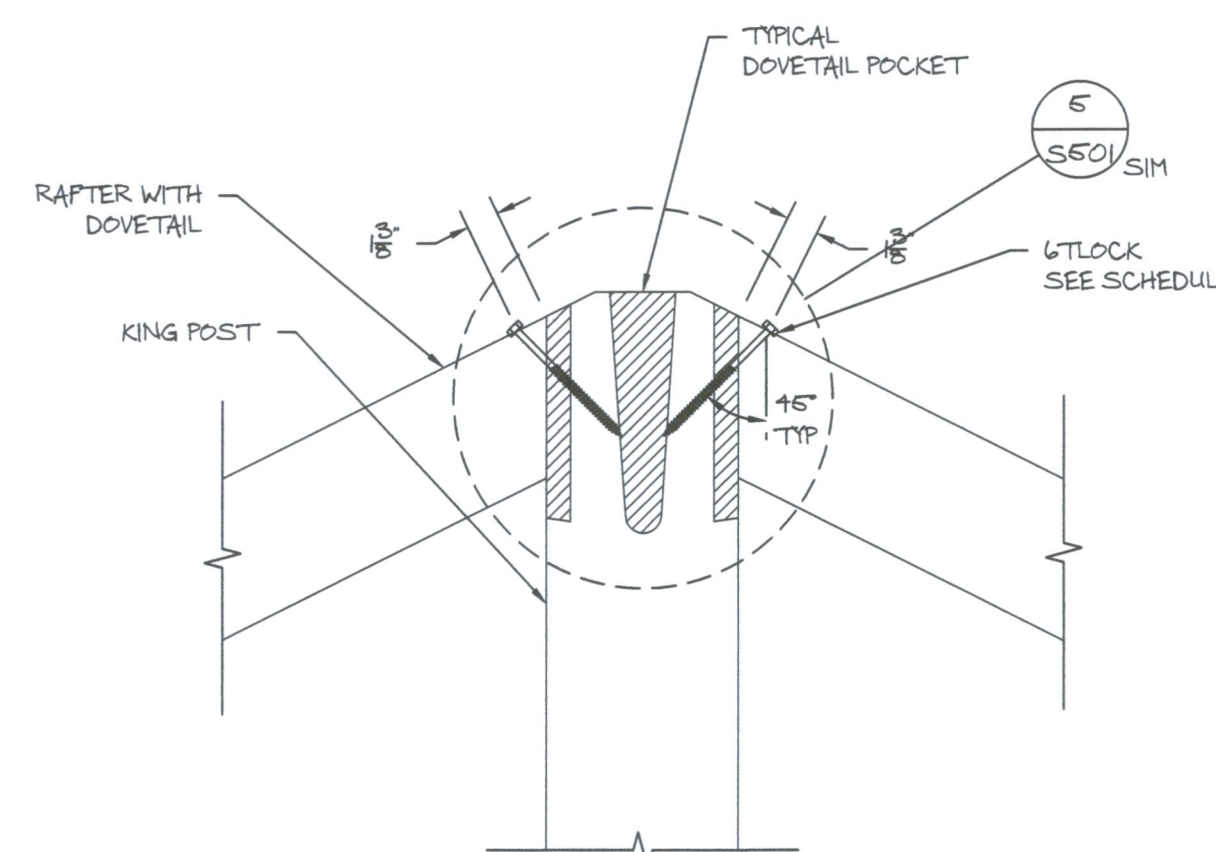
HIP TO COLUMN @ MASONRY
SCALE: 1/4" = 1'-0" 8



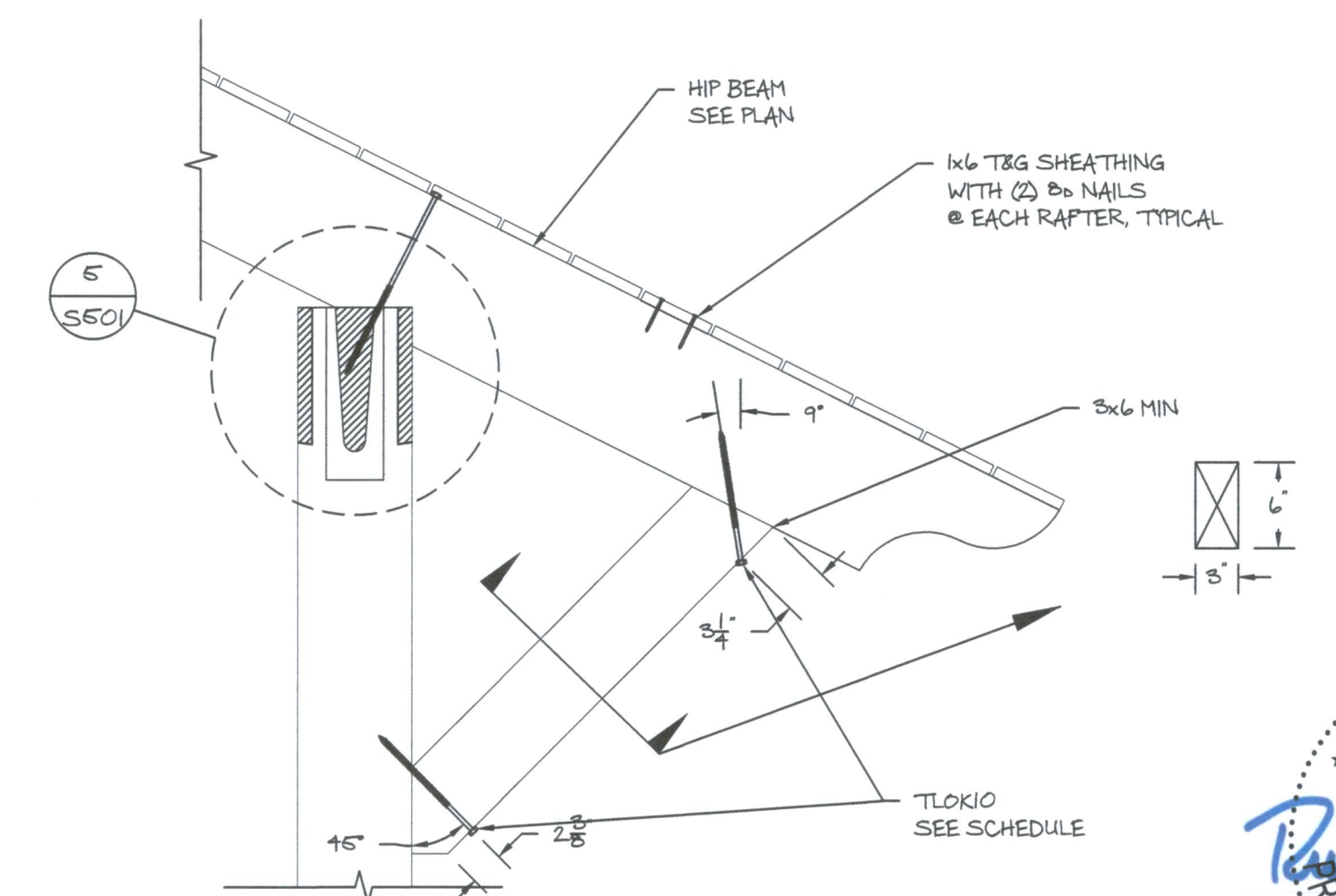
BEAM TO COLUMN
SCALE: 1/2" = 1'-0" 5



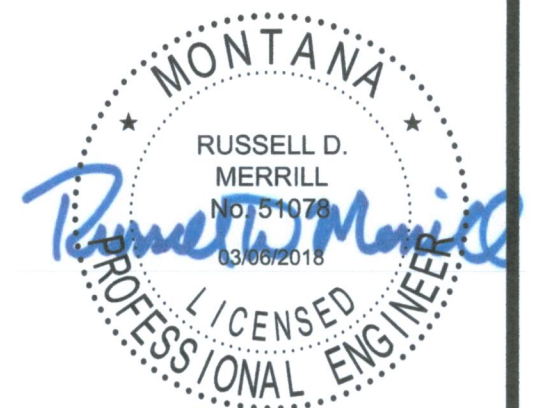
DIAGONAL BRACE AT BEAM TO COLUMN
SCALE: 1/2" = 1'-0" 2



HIP BEAM TO KING POST
SCALE: 1/2" = 1'-0" 6



BRACE AT HIP BEAM
SCALE: 1/2" = 1'-0" 3



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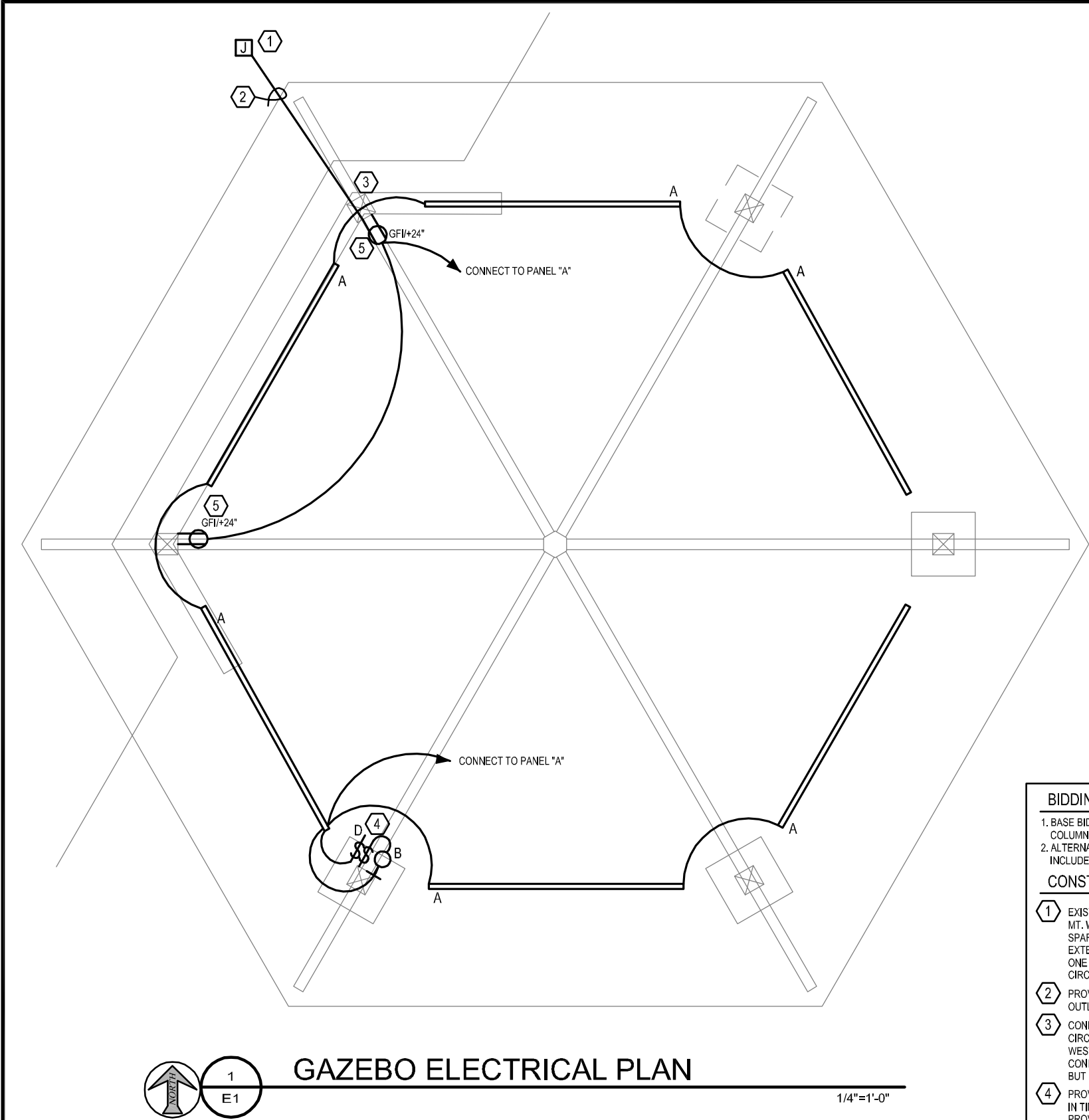


**Montana Fish,
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FRAMING DETAILS
MONTANA WILD EDUCATION CENTER GAZEBO PROJECT
FWP #17-16

LARSON CIVIL
ENGINEERING, LLC
28 ANTLER AVENUE
CLANCY, MT 59634
406-443-6111
jeff@larsonce.com

SHEET:
S501



Electrical Specifications

Scope: All electrical work under this contract as shown on the plans and indicated in the specifications. Work shall be performed by a licensed and bonded contractor utilizing tradesmen skilled in the art and in accordance with acceptable practices. All work shall comply with local, state, and the National Electrical Code, latest edition.

Permits: The electrical contractor shall secure all permits in connection with his work.

Work Included: All lighting and power systems including fixtures, devices, boxes, conduit, etc. Provide and install all incidental items required for a complete and functioning system.

Tests: Prior to tests or usage, all switches, panels, devices shall be in place. All branch circuits shall be free of faults or shorts. The complete installation and all components shall have a resistance between conductors and between conductors and ground as specified by the N.E.C.

Ground: There shall be continuity of ground throughout the system. System ground to comply with N.E.C. requirements.

Materials: All materials such as receptacles, switches, conduit, conductors, panelboards, devices, fixtures, etc. to be new and bear the U.L. label or to conform to applicable standards.

Guarantee/Warranty: Contractor guarantees that all work and plant will be free from defects of materials and workmanship for a period of one (1) year from the date of final acceptance. Contractor further agrees that he will replace or repair all defective equipment and installation that become defective during the term of the warranty. This does not include excessive abuse or damage inflicted by the owner and/or others.

Manufacturers Directions, Procedures and Operating Instructions: Manufacturers materials, and equipment applied, installed, connected, erected, used, cleaned, and conditioned as per manufacturers directions or recommendations prior to installation.

Installation: All equipment, circuitry, etc. shall be installed as follows or as specified otherwise. The electrical contractor shall verify all nameplate ratings of equipment to be connected and verify electrical compatibility and code compliance. Manufacturer's recommendations shall take precedence unless verified otherwise.

Conductors and Cable: All conductors shall be copper with a weather resistant thermoplastic cover. No branch circuit conductors shall be smaller than #12 unless for low voltage wiring.

Conduits: PVC schedule 40 acceptable where routed underground.

If PVC is used, provide ground wire. Compression couplings in wet locations and in concrete walls and floors. Romex and MC cable are not acceptable.

Outlet Boxes:

Fixture and Special Purpose 4" x 4" x 2 1/8"

Duplex, Switch and Telephone 3" x 2" x 2 3/4"

Wire and Cable: Type THHN or THWN for application or as noted otherwise.

Color code in accord with the NEC.

Current Characteristics: 120/240V, 1 phase, 3W

Wiring Devices: Product: Leviton, P&S, Hubbell, and Slater acceptable. Switch and receptacle colors; selected by owner. Devices and finish plates to match in color - no exceptions.

1. Standard switches 20 amps, 277 volt with matching smooth plastic plate. Mount 44" to centerline.

a. 1 pole Single pole toggle, 20A, Model No. CSB1-20

2. GFCI receptacle, 20 amp, 125 volt - Model number 68991 with matching plate zinc weather resistant cover where indicated W.P.

LIGHT FIXTURE SCHEDULE

LTR.	SYMBOL	DESCRIPTION	MANUFACTURER	CATALOG NO.	LOCATION	MOUNTING	LAMPS CAT. NO.	NOTES
A		8' LED CHANNEL ALONG PERIMETER BEAM WET LOCATION	EDGE	LC45C-24V-96IN-D 3D-SA-W	CEILING/BEAM	SURFACE	5W/FOOT LED	1 120V
B		EXTERIOR WALL PACK SAFETY LT WITH PHOTOCELL LED LAMPING	LITHONIA	OLWP-LED-P140 120-PE-BZ	COLUMN	COLUMN 8' AFF	22.8W LED	1 120V

NOTES:

- 1 PROVIDE OUTDOOR RATED REMOTE DIMMABLE POWER SUPPLIES FOR LED LIGHTING, TWO 200W SUPPLIES, OR PROVIDE NEMA 3R ENCLOSURE FOR POWER SUPPLIES, MOUNT HIDDEN FROM VIEW.

BIDDING NOTES:

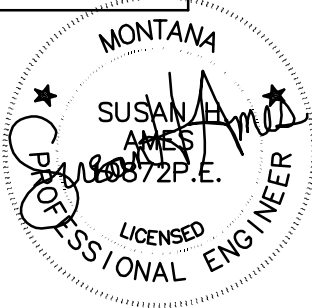
1. BASE BID TO INCLUDE CONDUIT FROM JUNCTION BOX TO FIRST COLUMN ONLY.
2. ALTERNATE #1 TO INCLUDE ALL ELECTRICAL WORK NOT INCLUDED IN THE BASE BID.

CONSTRUCTION NOTES:

- 1 EXISTING JUNCTION BOX WITH EMPTY CONDUIT FROM MT. WILD BUILDING. PROVIDE NEW FEEDERS FROM TWO SPARE 20A/1P BREAKERS IN EXISTING PANEL "A" IN BLDG. EXTEND 6#10 IN EXISTING CONDUIT TO FIRST OUTLET. ONE CIRCUIT SHALL FEED THE TWO OUTLETS AND ONE CIRCUIT SHALL FEED THE LIGHTING.
- 2 PROVIDE UG CONDUIT FROM EXISTING J-BOX TO FIRST OUTLET ON COLUMN, 6#10 IN 1" CONDUIT.
- 3 CONNECT LIGHTING AND OUTLETS TO NEW INCOMING CIRCUITS VIA INTERIOR CHANNEL IN WOOD COLUMN, WESTERN TIMBER FRAME VOLT POST OR EQUAL. CONDUIT CAN BE SURFACE MOUNTED BETWEEN COLUMNS, BUT MUST BE HIDDEN FROM VIEW OR PAINTED.
- 4 PROVIDE TWO LIGHT SWITCHES WITH LOCKING COVERS IN TIMBER FRAME COLUMN POST (DRAGON SERIES). PROVIDE DIMMER SWITCH FOR BEAM MOUNTED LIGHTS AND SWITCH FOR POST MOUNTED LIGHT. PROVIDE COVERS AND LOCKS. SWITCHES TO BE OPERATED BY FWP ONLY.
- 5 PROVIDE ELECTRICAL DEVICES IN TIMBER FRAME COLUMN POST (DRAGON SERIES) AS SHOWN.

ELECTRICAL LEGEND

	PANEL OR LOAD CENTER		LIGHT FIXTURES, WALL MOUNTED
	HOME RUN TO PANEL, NO. OF ARROWS INDICATES NO. OF CIRCUITS.		SWITCH, DIMMER
	NO. OF HASH MARKS INDICATES NO. OF CONDUCTORS IN CONDUIT. NO HASH MARKS INDICATES TWO CONDUCTORS-GROUND CONDUCTORS ARE NOT INCLUDED IN WIRE COUNT.		OUTLET, DUPLEX
	LIGHT FIXTURE, SURFACE MOUNT		OUTLET, GROUND FAULT INTERRUPTER
			SPECIAL CONNECTION
			GROUND FAULT INTERRUPTER



S. AMES MAR. 19, 2018
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ELECTRICAL PLAN

MONTANA WILD EDUCATION CENTER GAZEBO PROJECT
FWP #17-16

AMES
ENGINEERING, LLC
815 JADE STREET
HELENA, MT 59602
PHONE/FAX: (406) 458-0494
E-MAIL: susanames@mt.net

SHEET:

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